**Listing of claims:**

1. (Canceled).

2. (Currently Amended) A road surface condition change estimation apparatus that is mounted on an automobile and estimates a change in condition of a road surface where said automobile runs, said road surface condition change estimation apparatus comprising:

a rotation angular acceleration measurement module ~~that measures~~ configured to measure a rotation angular acceleration of a drive shaft, which is mechanically linked to drive wheels of said automobile; and

a condition change estimation module ~~that estimates~~ configured to estimate the change of the road surface condition, based on a variation in period of a time change of the measured rotation angular acceleration that increases to or over a predetermined reference value,

wherein a period of time change in a first peak is compared with a period of time change in a opposite peak that is detected immediately after the first peak.

3. (Currently Amended) A road surface condition change estimation apparatus in accordance with claim 2, wherein said condition change estimation module is configured to estimate ~~estimates~~ the change of the road surface condition, in response to a variation in period of a time change of the measured rotation angular acceleration at or over a predetermined rate.

4. (Currently Amended) A road surface condition change estimation apparatus in accordance with claim 3, wherein said condition change estimation module is configured to estimate ~~estimates~~ an abrupt increase in friction coefficient on the road surface, when the period of the time change of the measured rotation angular acceleration in [[an]]the opposite peak detected immediately after [[a]]the first peak, which appears after an increase of the rotation angular acceleration to or over a predetermined reference value, is shorter than the period of the time change in the first peak by or over the predetermined rate.

5-17. (Canceled).